Data Sheet

HUBER+SUHNER

GPS-over-Fiber
GPSoF16 (RX)

Description

The GPS-over-Fiber 16 (RX) receiver enables efficient optical timing signal to RF conversion for applications such as remote antenna connection in GNSS receiving systems in combination with HUBER+SUHNER GPSoF modules.

Features

- Optical to RF signal conversion with 16 RF outputs
- For GPS, Galileo, Glonass, BeiDou, IRNSS, QZSS and other GNSS systems
- Efficient low loss reference signal distribution (time and location)
- NEBS level 3 carrier grade

Order Information

Item Description	Item Number
GPSoF16 (RX)	85134363

Electrical Data

Parameters			Value			Remarks
			min.	typ.	max.	
All specifications at 25°C case Temperature T_c , unless otherwise specified						
GNSS band				L1+L2		
Gain (link with TX)		dB		18		optical path loss not included
Gain flatness		dB		< 2		
Noise figure (link with TX)		dB		6.5		optical path loss not included
VSWR (RF output)				< 2		
Time delay (link with TX) [1]		ns		55		optical path delay not included
Supply voltage		VDC	+ 10	+ 12	+ 35	<0.2 A
Temperature range	operating	°C	-5		+ 55	
	storage	°C	-40		+ 85	
RF output impedance		ohm		50		
Module weight		kg / lbs		2.2 / 4.85		
Dimensions		mm / inches		285 x 430 x 44 / 11.2 x 19 x 1.75		19” 1 RU
RF connectors				16 (SMA female)		

[1] *Total link time delay calculation Total delay [ns] = time delay TX [ns]+ time delay RX [ns]+ Time delay single mode fiber 1310nm [ns/m] * link length [m]*
*Example 100m link delay = 55 ns + 100m * 4.9 ns/m = 545 ns*

Optical Data

Parameters		Value			Remarks
		min.	typ.	max.	
All specifications at 25°C case Temperature T_c , unless otherwise specified					
Fiber optic connectors			LC/UPC		other connectors available
Fiber			standard single mode 9/125 um		
Optical input power	mW			5	
Side mode suppression ratio	dB	30	40		

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Mechanical Data

GPSoF16 (RX)

Dimensions Outline Drawing: DOU-00391337

Input	Output	Description	Interface
	X	GPS out	SMA (female)
X		FO in	LC/UPC (bulkhead)
X		12 VDC in	3-pole connector jack

Front View:

Back View:

Additional Information

- All modules are RoHS Compliant
- All modules are EMC protected
- MIL and other certifications are possible upon request.
- Various racks and enclosures available
- All modules are single packaged

Important catalogue links

RF Cables: http://literature.hubersuhner.com/Technologies/Radiofrequency/RFCablesEN/

RF Connectors: http://literature.hubersuhner.com/Technologies/Radiofrequency/RFConnectorsEN/

FO Standard Assemblies: http://literature.hubersuhner.com/Technologies/Fiberoptics/FOcableassembliesEN/

HUBER+SUHNER is certified according to ISO 9001, ISO 14001, ISO/TS 16949 und IRIS www.hubersuhner.com